THE BORDERLAND BETWEEN MEDICINE AND SURGERY IN RELATION TO CHRONIC PROSTATITIS.¹

BY JOSEPH R. WISEMAN, A.B., M.D., INSTRUCTOR IN MEDICINE, COLLEGE OF MEDICINE, SYRACUSE UNIVERSITY.

CHRONIC inflammation of the prostate gland is one of the commonest diseases with which the adult male is afflicted. Out of approximately 500 adult men seen by the writer in medical practice, 36, or 7 per cent., were suffering from this disease. Chronic prostatitis is often overlooked, particularly when the symptoms do not point directly to the pelvic organs as the possible site of trouble; yet many symptom-complexes depend directly upon this condition, and their cure is well-nigh impossible without recognition and treatment of the primary prostatic disturbance.

This paper is not intended to be a treatise upon chronic gonorrhea, but to take up briefly a class of cases which presents general medical symptoms, particularly of a nervous character, caused by inflammation of the prostate gland. This may in turn depend upon a previous gonorrhea, perhaps long forgotten, or may have been induced by other causes. In discussing this subject I wish at the outset to express my great debt to the late Dr. Nathan Jacobson. Through his influence I was led to take an interest in this branch of medicine, his knowledge of which far exceeded that of any physician or surgeon I have ever known. The cases upon which this study is based are taken largely from Dr. Jacobson's records, partly from my own.

The normal prostate gland resembles a horse-chestnut in size and shape. It lies just below the neck of the bladder, and is penetrated from base to apex by the prostatic urethra. The structure of the prostate is comparatively simple, consisting of a connective-tissue capsule, from the inner aspect of which numerous muscular and connective-tissue bands run inward to form the stroma of the organ. In the interstices of the stroma, and supported by it, lie the prostatic glands. They are of the compound tubular type, and end in ducts which empty by fifteen or twenty openings into the prostatic urethra along the sides of the veru montanum. The two ejaculatory ducts pass through the substance of the prostate and empty upon the summit of the veru montanum, a small but important muscular structure which forms part of the floor of the prostatic urethra.

The prostate gland is provided with a free blood supply, and is surrounded by a plexus of veins so large and so closely interwoven

¹ Read before the Seventh District Branch of the Medical Society of the State of New York, October 1, 1914.

as to suggest the cavernous spaces of an erectile tissue. The veins of the prostate form one of the connecting links between the portal and inferior caval systems. The nerve supply shows an extraordinary wealth of nerve fibers, ganglion cells, and nerve endorgans. It is conceivable that the unusually rich blood and nerve supply of the prostate may determine on the one hand the readiness with which the gland undergoes congestive changes, and on the other hand the numerous local and general nervous manifestations associated with prostatic inflammation.

After studying the structure of the normal prostate it becomes easy to understand some of the changes which chronic inflammation brings about. If, for example, there is an increase of the connective tissue sufficient to compress some of the numerous tiny duets the secretion of the tubular glands becomes dammed back, dilatation of the glands follows, and often small cysts are formed. The inflammatory changes may involve principally the stroma which increases in density, thereby producing a hard prostate, or the glandular structures may bear the brunt of the inflammatory changes and become distended with purulent secretion. In the latter instance an enlarged but soft or adenomatous prostate results. As a rule, both the glands and the interstitial tissue are involved, although often in unequal degree. Cases of long standing with much sclerosis show contraction or even obliteration of many glands.

The most common cause of chronic prostatitis is, of course, gonorrhea. "For practical purposes," as Hugh Cabot says, "chronic gonorrhea is chronic posterior urethritis, and in the same way chronic posterior urethritis is chronic prostatitis." Inasmuch as the posterior urethra is probably involved in from 70 to 90 per cent, of all cases of gonorrhea, it goes without saying that chronic gonorrheal prostatitis must be a very common disease. It is not so generally recognized that there is an important class of cases in which chronic prostatitis exists with no antecedent gonor-The etiology of non-gonorrheal prostatitis is not entirely clear. Young believes that the prostatitis is of bacterial origin and that the organisms are probably conveyed to the prostate by the blood stream or from contiguous structures, notably the rectum. Of underlying factors the most important appear to be prolonged sexual excitement without gratification; excessive masturbation or sexual intercourse; irregular sexual practices, as coitus interruptus; and occasionally bicycle- or horseback-riding. Lydston states that when the periods of rest between the acts of ejaculation are so short that the circulation cannot regain its normal equilibrium, disturbances of the prostate are likely to follow. He considers that any masturbator who has practised the habit for any considerable length of time may be regarded as having a more or less swollen and tender prostate. Keyes lays stress upon cases where

there is association with a person of the opposite sex who permits dallying, even though coitus is not indulged in, thereby producing excessive dilatation of the prostatic vessels. Any or all of the above-mentioned factors probably pave the way for later bacterial invasion.

The symptomatology of chronic prostatitis is exceedingly varied, and, as Young says, may involve any of the organs in the various regions between the diaphragm and the toes. Pain is one of the most common complaints, usually dull and aching in character. It may involve the abdomen, back, external genitals, rectum, perineum, or be referred down the legs even to the toes. Among the conditions simulated may be renal calculus, lumbago, varicoccle, sciatica, disorders of the abdominal viscera, and neurasthenia. Young has reported a number of cases in which there was strong resemblance to renal colic, even to the appearance of blood in the In some instances the symptoms very closely simulate those of prostatic hypertrophy. Here it is exceedingly important to recognize the true condition, as proper treatment will save the patient from catheter life or an operation. McCrae mentions cardiae symptoms, such as anginal pains, palpitation, and tachycardia, accompanied by feelings of anxiety and distress. A common complaint is a sensation of fulness just within the anus, even though the rectum may be entirely clear of feces. With reference to urination there may be pain before, during, or after the passage of urine, or inability to expel the last drops of urine. Among the sexual symptoms may be mentioned diminution or loss of sexual power, premature ejaculations, and nocturnal pollutions.

The mental effects of chronic prostatitis are of great importance. Dercum states that there is apt to be difficulty in the performance of mental acts which require concentration, and a distinct disinclination for mental work. The sleep is often distrubed and true insomnia may result. The well-known picture of sexual neurasthenia or hypochondria is familiar to all. The patient has his mind constantly fixed on his sexual organs, believes that he is afflicted with severe or incurable maladies, and falls a ready prey to the quack, who knows best how to play alternately upon his hopes and fears.

The diagnosis of these conditions is simple. It depends upon rectal touch and the examination of the expressed prostatic secretion. The prostate usually feels enlarged, and may be irregular and indurated, or soft and boggy. Often it is nodular or shotty, due to dilated or cystic glands, and in many cases areas of softening and infiltration are irregularly encountered over the surface of the gland. Old inflammatory adhesions may extend from the prostate to the sides of the pelvis, making the organ more fixed than normal, and usually involving the seminal vesicles, with obliteration of the furrow between the upper margin of the prostate and each seminal

vesicle. Inflammatory changes in the substance of the vesicles may coexist. Tenderness of the prostate is frequently met with, and in some cases the patients can hardly endure the lightest touch.

Normal prostatic secretion is a thin, milky fluid containing principally lecithin bodies (round, refractile structures the size of a red blood cell), granular phosphates, mucus and an occasional leukocyte, epithelial cell or amyloid body. In chronic prostatitis the secretion is increased in amount, and is yellow and thick. Occasionally it is tinged with blood. The characteristic feature of the microscopic examination is the presence of pus. Young states that in some cases pus is not found at the first examination, and the prostate may have to be massaged several times before pus appears. This, however, is not the usual occurrence. The amount of pus gives a rough estimate of the degree of inflammation. In cases which are progressing toward cure the polynuclear cells are gradully replaced by mononuclear elements. The constant absence of pus excludes active prostatic inflammation.

Investigation of the expressed secretion for bacteria is of some assistance. The finding of the gonococcus, of course, gives positive information, but as most of the cases are of long standing this organism is either very hard to find or has entirely died out, its place being taken by secondary invaders. Occasionally cases are reported in which the gonococcus has persisted in the prostate for a great many years, but many competent observers believe that it is exceptional for the organism to be found after three years. In the non-gonorrheal cases various bacteria have been encountered, such as the staphylococcus, streptococcus, or colon bacillus.

Inflammatory changes in the posterior urethra usually accompany prostatitis, and particularly affect the veru montanum or colliculus seminalis. Expert endoscopic examination is likely to reveal congestion, infiltration, or enlargement of this structure, with perhaps dilatation of the ejaculatory ducts. In many cases the prostatic urethra is extremely hyperesthetic.

The sheet-anchor of treatment is prostatic massage. Although a simple procedure, it is one that requires a considerable degree of skill when scientifically performed. The patient stands with his legs apart, the knees held stiff, and the trunk bent well forward. The physician is seated behind the patient and rests the elbow of the examining hand against his thigh for additional leverage. If preferred he may stand with one foot upon the seat of a chair and the elbow resting against his knee. In some cases it is necessary to press very firmly against the perineum in order to reach the upper part of the prostate. The free hand of the examiner may exert counterpressure over the lower abdomen if this is needed. The gland should be methodically and slowly stroked from above downward and inward, and the entire organ systematically covered. Two or three minutes are usually sufficient. Haphazard rubbing

of the rectal mucosa is to be avoided. At the first treatment it is well to err upon the side of gentleness, as with some patients massage seems to produce powerful reflex effects. They become pale and faint and are covered with profuse perspiration. At subsequent treatments the degree of pressure used can be gradually increased. It is desirable for the patient to have the bladder moderately full of urine or, perhaps even better, for the physician to distend it with a mildly antiseptic solution. Failure to observe this precaution is said to occasionally result in infection of the urethra from the expressed prostatic secretion, although in our experience this has never occurred. In case no glove is worn on the examining hand, but only a finger-cot, additional protection is afforded by thrusting the finger through a small opening in the centre of a piece of gauze eight inches square. The value of prostatic massage lies in periodically emptying the dilated prostatic tubules of their retained secretion, and in promoting absorption of the inflammatory infiltration of the prostatic tissue. Ordinarily it should not be repeated oftener than once in three to five days, the latter interval usually being the most satisfactory.

Instillations into the posterior urethra by means of a drop syringe are often very helpful in overcoming the associated posterior urethral inflammation or irritability. We have had the best results with a 30 per cent. solution of Argyrol. In some cases hot or cold rectal irrigations with a two-way rectal tube help to stimulate the gland and promote resolution. In suitable cases additional urethral instrumentation may be needed, such as irrigations, dilatations, the passage of sounds, etc.

Every effort should be made to improve the patients' general health, and various tonics and sedatives may be needed. Sometimes, in intractable cases, a complete change of scene, with suspension of all treatment, will bring about a cure. Psychotherapy should not be forgotten. Most of these patients are introspective, and have a tendency to magnify their symptoms. Many of them become discouraged at the length of time necessary for cure. It is only too true that the most important element in the treatment of chronic prostatitis is time, and the longer treatment is continued the better are the chances of cure. An absolute anatomical cure can never be expected, as the pathological changes in the gland are usually too far-reaching for complete resolution, but a symptomatic cure can, as a rule, be obtained.

This paper is based upon the analysis of 161 cases of chronic prostatitis seen during the past twelve years. Of this number 100, or 62 per cent., gave a history or other evidence of the presence of gonorrhea; 61 cases, or 38 per cent., gave no history of gonorrhea. Even granting that a few of the patients may have been unwilling to admit a previous venereal infection the proportion of non-gonorrheal cases, fully one-third, is fairly large.

Case I.—Close simulation of lumbago; relief afforded by prostatic treatment. J. M., aged forty-six years, miller, seen February 2, 1903. Denies venereal disease. Nearly a year ago was seized with a "crick in the back." At first it was intermittent, lately it become constant. At times he cannot bend his back. The pain affects principally the lumbosaeral region. He has been treated by cauterization of the back and also by static electricity.

The prostate was found to be enormously congested, and after massage there was a very free discharge of prostatic secretion. Treatment by prostatic massage was continued at irregular intervals for two months. The prostate became much reduced in size and scarcely any discharge appeared after massage. The pain in the back disappeared save at rare intervals and the patient felt greatly

improved in strength and vigor.

Case II.—Symptoms suggesting prostatic hypertrophy; patient saved from eatheter life by treatment of neglected prostatitis. C. V. W., aged sixty-two years, manufacturer in metal trade, married, seen September 21, 1907. Patient had a mild attack of gonorrhea about forty years ago, and syphilis thirty or thirty-five years ago. Four or five years ago he began to have painful urination. The pain seemed to come on when the bladder was full of urine and persisted until urine was passed. At first the desire to urinate was not very pressing, but during the past year he has had periods of marked disturbance. As a rule, he urinates five or six times a day, and until lately has not been up at night. These periods of aggravation of the trouble recur every two or three months, and last four or five days. At such times he is obliged to urinate every two hours and the desire to pass urine during the time is increased. For the past three or four days he has urinated more frequently than usual. He is up three or four times at night and has distress at the end of urination. The urine is clear and he has never passed any blood. At no time has there been retention. A physician advised him to use a catheter, and he has done so for four or five days.

Examination showed the right lobe of the prostate to be sensitive and much larger than the left; both were of soft consistency and easily reduced by massage. Three ounces of residual urine were found in the bladder. At the end of two and a half months' treatment the prostate had lost its tenderness and was nearly normal in size. The patient experienced marked relief from symptoms, was able to sleep all night in comfort, and had no disturbance of urination by day.

Case III.—Urinary symptoms depending upon old gonorrheal prostatitis. V. K., aged forty-seven years, tailor, married, seen February 28, 1907. Patient denies venereal disease, but in 1890 had an internal urethrotomy performed for stricture. Five or six years ago he began to suffer from burning during urination and a sense of pinching of the bladder. As soon as the urine enters

the bladder there is a desire to urinate. This desire begins to manifest itself within fifteen minutes after he has emptied his bladder. He is then in great distress until he can void urine. The longest period that he can hold it is one and a half hours. At night he does not awaken until five in the morning, and is then obliged to urinate several times in succession. He feels the irritation and pressure mostly at the head of the penis. The bladder holds, he thinks, about three ounces. He is very comfortable after urinating. If he holds the urine too long it is apt to dribble away.

The prostate was normal to touch, but the right seminal vesicle was tender. Upon massaging the prostate a gleety discharge occurred which contained gonococci. No evidence of urethral stricture or bladder stone was found.

Treatment.—Prostatic massage, with deep urethral injections of 2 per cent. silver nitrate solution at five-day intervals, tonics, urinary sedatives, and antisepties. Improvement began almost immediately, and at the end of ten months the urinary symptoms had almost completely disappeared. The patient was able to hold his urine many hours by day, was not disturbed at night, and felt stronger and better in every way.

Case IV.—Unusual sexual symptoms depending upon chronic prostatitis. T. D., aged sixty-five years, miller, seen February Denies venereal disease. Has been married twice. Prior to his first marriage he suffered a great deal from seminal emissions. During the early years of his first marriage he did not have proper control of his sexual organs during intercourse, but of late there has been no trouble in this direction. For a period of several years he has been awakened at night, from one to three or four times a week, with a series of painful erections. Each time it is associated with an urgent desire to urinate. Sometimes this occurs four or five times a night. The next day he feels completely tired out. He suffers from a feeling of pressure and bearing down in the left side of his scrotum and over his left hip. Other nights he is apt to be awakened two or three times to urinate. During the day he urinates about four times. He is ant to urinate oftene. on the days following the crotic nights. He never has had any failure of sexual power, but feels nervous and broken down in health.

The prostate was found to be moderately enlarged, soft, and easily reduced by pressure. Two drachins of residual urine were present. The patient was somewhat improved by repetition of the massage, but did not come regularly for treatment.

Case V.—Headaches induced by sexual intercourse, and caused by chronic prostatitis. R. R., aged forty-five years, farmer, married, seen April 1, 1911. Two and a half years ago he had an obstinate attack of gonorrhea. A year ago he began to have attacks of pain in the forchead and back of his head, lasting about twenty-four hours. Each time the attacks would be brought on by sexual intercourse. While engaged in the act he would be seized with intense pain in the back of his head, which would extend to the forchead. These seizures do not occur every time he has intercourse, but have become more frequent of late.

The urethra was found to be very sensitive, and the prostate exceedingly tender, enlarged, and soft, with greater involvement of the right lobe. Under massage it was considerably reduced in size.

Treatment consisted of prostatic massage, instillations of Argyrol into the prostatic urethra, and suitable medication. The patient was advised to abstain from sexual intercourse as much as possible. He was under observation for two and a half months, and showed great improvement. The attacks of pain during intercourse entirely disappeared, his sexual vigor became greater than for many years past, and his general condition decidedly better.

Case VI .- Sexual neurasthenia relieved by treatment of the prostate and urethra. M. M., aged thirty-nine years, married, railway mail clerk, seen June 8, 1910. Patient had gonorrhea twelve years ago and again three years ago. For several years has worried excessively over trifles. Six months ago he had an attack in which he began to tremble and felt as if he would collapse. He has had frequent spells of this kind since. For three months has been troubled with insomnia. He has what he calls shivers and seems to tremble inside. He is weak and tired and has pains in the heels after standing. Blood rushes to the head at times and there is ringing in the ears. He is particularly anxious about his sexual organs and his mind is constantly occupied with sexual matters. The patient admits excessive indulgence in sexual intercourse, but states that of late his sexual vigor has diminished and he fears that he is losing his vitality. After urinating he frequently feels as if he had not fully emptied his bladder, and there is apt to be a stinging sensation with some dribbling of urine.

Nothing abnormal was found in the urethra, but it was exceedingly sensitive to the passage of a sound. The prostate was very large, and after massage there appeared a great quantity of nucopurulent secretion streaked with blood.

The patient was under observation for over a year and was treated by massage of the prostate, the passage of sounds, and suitable internal medication. The urethral sensitiveness entirely disappeared, but when last seen the prostate was still large and considerable secretion could be expelled by massage. The symptomatic improvement, however, was very marked. The numerous nervous manifestations largely disappeared. The insonnia was replaced by restful sleep, the sexual life became more nearly normal, and the ability to do better work and to enjoy life were greatly increased.

CASE VII.—Sexual hyperesthesia causing excessive sexual excitement. H. M., aged thirty-two years, married, seen July 3, 1911. Patient never has had any definite illness. States that he began to masturbate when he wore dresses, and has always been exceedingly passionate. For years his sexual desire has been most violent, and he sometimes has intercourse with his wife as many as six or eight times in a single night. He is thoroughly aroused over his condition and tries very hard to control himself, but seems unable to do so. He is very nervous and has a great deal of indigestion. He has pain in the back and a feeling of irritability in the rectum.

The prostate was found to be greatly enlarged and soft. A large quantity of prostatic secretion was forced out by massage. Immediately the patient had a series of hysterical convulsions. He jerked, twitched, and was greatly agitated. He afterward stated that many years ago he had been similarly affected by having sexual intercourse. After three and a half weeks of treatment by prostatic massage an attempt was made to pass a sound, but the mere introduction of it into the meatus again threw him into convulsions. The influence of massage, however, was little short of wonderful. The nervous symptoms showed great improvement, the stormy sexual desires lessened, and after a time he could endure the passage of a sound without difficulty.

In this case the excessive masturbation of early life probably led to congestion of the prostate, which was later followed by true prostatitis. The inflamed prostate still further stimulated the patient's sexual desires, which were always unduly strong, until

relief was obtained by suitable treatment.

Case VIII.—Painful seizures of obscure origin; stone suspected; relief afforded by treatment of the prostate and deep wrethra. J. M., aged fifty years, druggist, seen April 30, 1912. Patient never had any acute illness, although he has never been vigorous. Ten years ago he broke down nervously, and since then his power of endurance has been much diminished. Two years ago he was taken with pain to the left of the navel, which extended into the groin. The next day he vomited and had a continuance of the pain. Three weeks later he had a similar attack of pain which extended to the end of the penis and up his left side into the back. For a year he had recurring seizures of pain about every three weeks. He never passed any gravel. Roentgen-ray examination for stone was negative. The urinary tract was carefully investigated on several occasions, including ureteral catheterization, but nothing abnormal was found save a small swelling on the veru montanum. This was treated with silver nitrate and the patient had no attack of pain for a whole year. Lately he has had a constant desire to urinate and an uncomfortable feeling after urinating. The pain extends to the head of the penis, but if his bowels move freely the pain disappears. He complains of smarting in the perineum, with pain in the right groin and right hip. For the past week he has had pain shooting up and down the penis, and the desire to urinate has been very urgent.

The prostate was found to be considerably enlarged, especially the right lobe, and the seminal vesicles were swollen. Under massage considerable reduction in size was apparent.

Treatment by massage of the prostate and the injection of 30 per cent. Argyrol into the deep urethra gave the patient considerable relief, but he remained under observation only a short time.

Case IX.—Attacks of abdominal pain of obscure origin caused by chronic prostatitis. R. B., aged thirty-five years, farmer, married, seen October 12, 1911. Patient has never had any serious illness. Two or three years ago, in midwinter, when it was very cold, he was drawing logs and had an attack of what was called inflammation of the bladder. It was attended with a constant desire to urinate and some difficulty in passing urine, together with pain across the lower abdomen. In a day or two he was well again. About a year ago; while milking a cow, he was seized with severe pain in the right inguinal region. The pain was so intense that he could not get to his house. It lasted an hour and was followed by tenderness which persisted for a week. At times he has had a creeping and trembling sensation throughout the abdomen. Six days ago he began to have pain in the left side of the abdomen below the level of the umbilicus. The pain extended into the left testicle and lasted half Two days ago the pain recurred in the left groin, extending into the left testicle, and was associated with a cramping of the muscles on the inner side of the thigh. The pain was so severe that he was forced to lie down in the field. At no time was there difficulty in passing urine. At present he has so much tenderness that he is unable to work.

On examination a left-sided varieocele was found. The prostate was considerably enlarged and tender, the right lobe more than the left. The urine contained no blood. The patient was under treatment for only six weeks, but during that short time showed definite improvement, with no return of the painful seizures from which he had suffered.

CASE X.—Attacks of pain in lower abdomen definitely relieved by treatment of prostate and deep urethra. E. C., aged fifty-six years, farmer, married, seen January 6, 1910. Four years ago he began to have attacks of dull pain across the lower abdomen. If he became constipated the pain was likely to come on. At first the attacks were of a few hours' duration and occurred about once in six or eight weeks. Recurrence of pain has lately been more frequent. The seizures are usually associated with an increased desire to urinate, but he has no pain associated with urination. For the past three weeks he has been obliged to pass urine once during the night. Frequently the pain is relieved by movements of the bowels. If he can have sexual intercourse when an attack appears to be impending he can usually avoid its occurrence.

The prostate and seminal vesicles were moderately enlarged and quite a little secretion appeared after massage. Catheterization showed half an ounce of residual urine in the bladder. Treatment consisted of massage and deep urethral instillations of 30 per cent. Argyrol. The patient showed steady improvement. During the early months of observation he was obliged to have fairly regular treatments in order to keep in good condition. If there was an interval of ten days between treatments he began to have an uneasy sensation about the prostate, perineum, and rectum, and if two weeks elapsed he was very certain to have a bad attack. Gradually he was able to take the treatments less and less often, until finally he could wait several months without suffering any evil results. The patient was seen last on June 27, 1914. He had not been treated for ten months, but stated that he had been very comfortable until within a few weeks. He had then experienced a recurrence of his old trouble, with severe pain in the lower abdomen, lasting two or three hours, and compelling him to lie down. The prostate was only a little enlarged, but was tender, hard, and nodular.

Case XI.—Symptoms of general neurasthenia with no indications of disturbance of the prostate; chronic prostatitis discovered in course of routine examination. T. L., aged thirty-five years, stenographer, single, seen September 30, 1913. Denies venereal infection. Has never been strong, but has had no serious illness. Patient has been nervous for about ten years. Complains of a full feeling in the ears and does not sleep well. Head gets tired after he works hard. He has a throbbing sensation in various parts of the body and the legs feel weak. Finds it hard to concentrate his mind. Is easily annoyed by trifles. Has frequent headaches and dizziness, and a cough which he considers of nervous origin. Urinates once

or twice at night and rather frequently by day.

Examination revealed no organic anomaly save for the condition of the prostate. This was found to be moderately enlarged, soft, succulent, and very tender. After massage a profuse, purulent, yellow secretion literally poured from the penis. The patient has been under treatment for a year, and was last seen on August 15, 1914. The prostate was smaller but much firmer, and presented areas of softening alternating with small nodules. There was no special tenderness. The secretion expressed by massage was thinner and less abundant. The patient stated that his general health and nervous strength have been greatly benefited. He is able to endure more, can concentrate his mind more easily, sleeps better, and rarely has headaches or dizziness. The cough has disappeared

These cases are illustrative of some of the common types of disturbance produced by chronic prostatitis. In many of them certain urinary or sexual symptoms might make one think of the

prostate as a possible source of trouble, but in others absolutely no indications are present to lead the diagnostician to the region of the pelvis. Young very aptly says that if the systematic and complete physical examination, so thoroughly emphasized today, were extended regularly to the prostate, many obscure conditions would be readily made clear. "The locality of symptoms is not of necessity the seat of disease" (McCrae), and the area to which the patient refers his complaints may be far from the primary source of trouble. It is well understood that pelvic disturbances in women may cause a great variety of reflex symptoms, often in distant parts, but it is not so commonly believed that similar conditions are encountered in disease of the male pelvic organs. Finally, a diagnosis of neurasthenia in the male is never justified unless a thorough examination of the prostate gland has been made.

REFERENCES.

Bangs, L. B. Some Phases of Prostatic Disease, New York Medical Jour., xev. 1254.

Cabot, Hugh. American Practice of Surgery, Bryant and Buck, vi, 762.

Dercum, F. X. The Nervous Phenomena of Prostatic Disease and their Relation to Treatment, Therap. Gaz., 3d series, xxix, No. 2, 77.

Keyes, E. L. Genito-urinary Diseases, D. Appelton & Co., 1903, p. 314.

Lydston, G. Frank. A Text-book of Genito-urinary, Venereal, and Sexual Diseases, F. A. Davis Co., 1899, p. 628; Sexual Neurasthenia and the Prostate, Med. Rec., February 3, 1912. p. 218.

McCrae, Thomas. The Remote Effects of Lesions of the Prostate and Deep Urethra, Jour. Amer. Med. Assoc., lxi, 477.

Morton, H. H. Genito-urinary Diseases and Syphilis, F. A. Davis Co., 1912, p. 124. Portner, Ernst. Genito-urinary Diagnosis and Therapy (translated by Bransford Lewis), C. V. Mosby Co., 1913, p. 79.

Wilson, L. B., and McGrath, B. F. Surgical Pathology of the Prostate. Collected Papers by the Staff of St. Mary's Hospital, 1911, p. 247.

Young, Hugh. Modern Medicine, Osler, vi. 342.

Young, Geraghty, and Stevens. Chronic Prostatitis, Johns Hopkins Hosp. Rep., xiii, 271.

PRACTICAL OBSERVATIONS DRAWN FROM ONE HUNDRED AND SIXTY-ONE CASES OF HYSTERECTOMY.

BY WILLIAM EDGAR DARNALL, A.M., M.D., F.A.C.S., ATLANTIC CITY, N. J.

THE subject of hysterectomy has been so thoroughly investigated that there seems to be little more left to be said as to its indications. its technique, or its results. Yet sometimes the retreading of the well-worn paths of experience may be productive of practical ideas and improved methods. We each develop our own ways of doing things, and we each may have experiences that are not common to all.